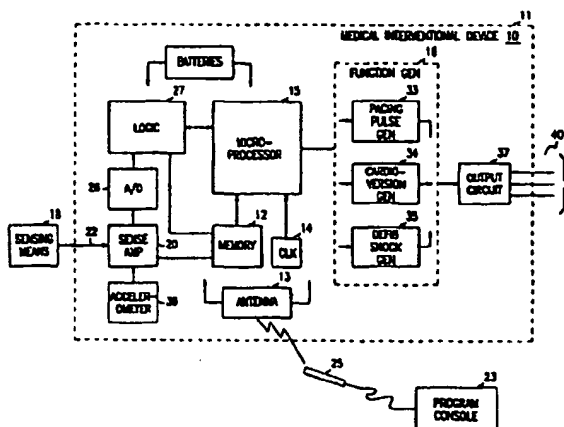


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(71) Applicant: <b>INTERMEDICS INC. [US/US]; 4000 Technology Drive, Angleton, TX 77515 (US).</b>			
(71)(72) Applicants and Inventors: <b>ALT, Eckhard [DE/DE]; Eichendorff Strasse 52, D-85521 Ottobrunn (DE). SANDERS, Richard [US/US]; 14122 Loftly Mountain Trail, Houston, TX 77062 (US). STOTTS, Lawrence, J. [US/US]; 327 Linden Lane, Lake Jackson, TX 77566 (US).</b>			
(74) Agent: <b>VIKSINS, Ann, S.; Schwegman, Lundberg, Woessner &amp; Kluth, P.O. Box 2938, Minneapolis, MN 55402 (US).</b>			

(54) Title: **METHOD AND APPARATUS FOR DUAL CHAMBER BI-VENTRICULAR PACING AND DEFIBRILLATION**

## (57) Abstract

Device and method are disclosed in which leads with pacing and defibrillating electrodes are implanted into both the right and left ventricles of a patient's heart to enable simultaneous pacing of both ventricles to reduce the width of the QRS complex of the patient's cardiac activity to a more normal duration, and, when appropriate, to apply electrical shock waveforms to both ventricles simultaneously for lower energy defibrillation of the ventricles. In applying the defibrillation therapy, the defibrillating electrode in the left ventricle may be used as the anode and the defibrillating electrode in the right ventricle may be used as the cathode, or both ventricular defibrillating electrodes may be the anode and the metal case in which the shock waveform generator is implanted may be the cathode. Implanting a lead with pacing and defibrillating electrodes in the right atrium enables selective pacing and defibrillation of the atria, in which atrial fibrillation is treated by applying the shock waveform across the right atrial and left ventricular defibrillation electrodes.

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